

Title (en)
METHOD AND FLUIDIC APPARATUS FOR GENERATING PULSED AIR FLOW FOR SURFACE CLEANING AND SWEEPING

Title (de)
VERFAHREN UND FLUIDISCHE VORRICHTUNG ZUR ERZEUGUNG VON GEPULSTEM LUFTSTROM ZUM OBERFLÄCHENREINIGEN UND -KEHREN

Title (fr)
PROCÉDÉ ET APPAREIL FLUIDIQUE DE GÉNÉRATION D'UN ÉCOULEMENT D'AIR PULSÉ DESTINÉ AU NETTOYAGE ET AU BALAYAGE DE SURFACES

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Application
EP 17154575 A 20140403

Priority

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- EP 14778885 A 20140403
- US 2014032849 W 20140403

Abstract (en)
An oscillating or pulsing fluid stream, or flow 18, 132, 300, is produced from a flow of pressurized air by fluidic apparatus 10, 100, 130, 180, 220 in a device 250 configured for use in surface cleaning, sweeping, lawn care applications, and the like. Converging inlet chamber walls 20, 22, define a tapered internal lumen having a smooth narrowing profile is configured to generate at a power nozzle 44 a high velocity stream with minimal pressure drop. Downstream of the power nozzle, first and second control ports CP1, CP2 are in fluid communication with the high velocity stream 46 and with each other via an inertance loop 72 having a lumen of selected cross sectional area and length. The varying air flow is directed through an outlet chamber 14, 134 shaped to produce an oscillating flow 18 or a pulsating flow 132.

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CPC (source: EP US)
A01G 20/47 (2018.01 - EP US); **B05B 1/005** (2013.01 - EP US); **B05B 1/08** (2013.01 - EP US); **E01H 1/0809** (2013.01 - EP US)

Citation (applicant)

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DOCDB simple family (publication)
US 2014299672 A1 20141009; US 9765491 B2 20170919; CA 2908938 A1 20141009; CA 2908938 C 20210824; CN 105392567 A 20160309; EP 2983829 A1 20160217; EP 2983829 A4 20170419; EP 2983829 B1 20210721; EP 3235573 A1 20171025; EP 3235573 B1 20190626; US 10066351 B2 20180904; US 2017350081 A1 20171207; WO 2014165687 A1 20141009

DOCDB simple family (application)
US 201414244441 A 20140403; CA 2908938 A 20140403; CN 201480030605 A 20140403; EP 14778885 A 20140403; EP 17154575 A 20140403; US 2014032849 W 20140403; US 201715687162 A 20170825